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11311 Concept Boulevard Largo, Florida 33773 813 399-5334 Fax 813 399-5264

### Carol A. Weideman, Ph.D.

Director Regulatory Affairs

K973758

October 1, 1997

# SUMMARY OF SAFETY AND EFFECTIVENESS

# BioScrew® Absorbable Interference Screw

In accordance with the requirements of the Safe Medical Device Act of 1990 and 21 CFR 807.92, Linvatec Corporation is hereby submitting the 510(k) Summary of Safety and Effectiveness for the BioScrew® Absorbable Interference Screw.

### A. Submitter

Linvatec Corporation 11311 Concept Boulevard Largo, Florida 33773

# B. Company Contact

Carol A. Weideman, Ph.D. Director, Regulatory Affairs

# C. Device Name

Trade Name: BioScrew® Absorbable Interference Screw

Common Name: Bone Screw

Classification Name: Smooth or threaded metallic bone

fixation fastener

### D. Predicate/Legally Marketed Devices

Linvatec BioScrew Absorbable Interference Screw Arthrex Interference Screws Arthrotek Interference Screw

## E. Device Description

The BioScrew Absorbable Interference Screw is a cannulated, sterile, single-use bone screw made of an absorbable homopolymer derived from Poly (L-lactic Acid) similar to that used in bioabsorbable suture and will gradually be absorbed into the body.

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BioScrew® Absorbable Interference Screw
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### F. Intended Use

- 1. The BioScrew is used to provide interference fixation of patellar bone-tendon-bone grafts in anterior cruciate ligament reconstruction.
- 2. The BioScrew is used to provide interference fixation during femoral and/or tibial fixation in anterior cruciate ligament reconstruction using a soft tissue graft (semitendinosus, gracilis).
- 3. The BioScrew is used to provide interference fixation during posterior cruciate ligament reconstruction.

Implantation of the interference screw is accomplished through arthroscopy or arthrotomy. This device is a single-use device.

## G. Substantial Equivalence

The BioScrew Absorbable Interference Screw is substantially equivalent in design, function and intended use to Linvatec BioScrew Absorbable Interference Screw, Arthrex Interference Screws and Arthrotek Interference Screws.

Strength and degradation tests are planned to compare the BioScrew to the Arthrex and/or BioMet screws.

The similarities/dissimilarities to the predicate are shown in the attached table.

Summary of Safety and Effectiveness BioScrew Absorbable Interference Screw 510(k) # October 1, 1997 Page 3 of 3

# CHART OF SIMILARITIES AND DISSIMILARITIES

Company	Device Name	Intended Use	Material	Single-Use Reusable	Mathod of Starillasti	Design
New Product	BioScrew@ Absorbable Interference Screw	Provide interference fixation:  1. Patellar bone-tendon-bone grafts in ACL reconstruction  2. Femoral and/or tibial fixation in ACL reconstruction using a soft tissue graft  3. PCL reconstruction	Poly (L-lactic Acid)	Sterile Single-use	nylene Ide month elf life	Cannulated Headless & rounded head Diameter: 7mm-11mm Length: 20mm-30mm
Predicate Linvatec	BioScrewe Absorbable Interference Screw 510(k) #K960652	Provide interference fixation:  1. Patellar bone-tendon-bone grafts in ACL reconstruction  2. Femoral and/or tibial fixation in ACL reconstruction using a soft tissue graft  3. PCL reconstruction	Poly (L-lactic Acid)	Sterile Single-use	Ethylene Oxide 24 month shelf life	Cannulated Headless and rounded head Diameter: 7mm-9mm Length: 20mm-30mm
Predicate Arthrex, Inc.	Non-sheathed Interference Screws Full Threaded Screws 510(k) #K915424	Tibial ACL fixation. PCL femoral and tibial fixation and standard two incision type ACL procedures	Titanium	Sterile Single-use	Unknown	Cannulated Headless and rounded head Diameter: 6mm-10mm Length: 20mm-30mm
Predicate BioMet, Inc.	Arthrotek Interference Screw 510(k) #K934469	Interference fixation ACL and PCL reconstruction	Titanium	Sterile or non-sterile Single-use	Unknown	Rounded head Diameter: 7mm-10mm Length: 20mm-30mm

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FEB 2 7 1998

Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

Carol A. Weideman, Ph.D. Director, Regulatory Affairs Linvatec Corporation 11311 Concept Boulevard Largo, Florida 33773

Re:

K973758

BioScrew® Absorbable interference Screw

Regulatory Class: II

Product Codes: HWC and MAI

Dated: January 19, 1998 Received: January 20, 1998

### Dear Dr. Weideman:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the current Good Manufacturing Practice requirement, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic (QS) inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

# Page 2 - Carol A. Weideman, Ph.D.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for <u>in vitro</u> diagnostic devices), please contact the Office of Compliance at (301) 594-4659. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or at (301) 443-6597, or at its Internet address "http://www.fda.gov/cdrh/dsmamain.html".

Sincerely yours,

Fr Cella M. Witten, Ph.D., M.D.

Director

Division of General and Restorative Devices Office of Device Evaluation Center for Devices and Radiological Health

**Enclosure** 



This information is exempt from disclosure under Exemptions 3 and 4 to Concept Boulevard Largo, Florida 33773-4908 8D 392-646f the Freedom of Information Act.

758<sub>(Optional</sub> Format 1-2-96)

Date	october 1,	1997		Page	1	of	1			
510(k) Number (if known): <u>K973758</u> Device Name: <u>BioScrew® Absorbable Interference Screw</u>										
Indications for Use:										
<ol> <li>The BioScrew is used to provide interference fixation of patellar bone-tendon-bone grafts in anterior cruciate ligament reconstruction.</li> </ol>										
2.	The BioScrew is used to provide interference fixation during femoral and/or tibial fixation in anterior cruciate ligament reconstruction using a soft tissue graft (semitendinosus, gracilis).									
3. The BioScrew is used to provide interference fixation during posterior cruciate ligament reconstruction.										
Implantation of the interference screw is accomplished through arthroscopy or arthrotomy. This device is a single-use device.										
(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)										
Concurrence of CDRH, Office of Device Evaluation (ODE)										
	21 CFR 801.109)	_ OR	Over+th	e-Counter	Us	e				
(Division Sign-Off)  Division of General Restorative Devices										